## Table D-F-1 Greenhouse Gases (GHG) RBLC Search - Natural Gas Piping Components Invenergy, LLC - Allegheny County Energy Center Project

		PERMIT															
RBLCID	FACILITY NAME	ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	PROCESS NOTES	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	UNIT	AVG TIME CONDITION	EMISSION LIMIT 2	UNIT	AVG TIME CONDITION	STANDARAD EMISSION LIMIT	UNIT	AVG TIME CONDITION
						1		Implement a leak detection and									
l	CAMERON LNG FACILITY	02/17/2017						repair (LDAR) program to									
LA-0316	CAMERON LNG FACILITY	ACT	fugitive emissions		0			minimize the leak	10	+		-					
								weekly checks for leaks using									
77/ 0024	JACKSON COUNTY	06/30/2017	N. 10 P. V					audio, visual, and olfactory (AVO)	693.3	Tarn							
TX-0824	GENERATING FACILITY PRAXAIR CLEAR LAKE	ACT 10/19/2017	Natural Gas Fugitives		U			sensing for natural gas leaks	693.3	T/YR							
TX-0827	PLANT	ACT	HyCO FUGITIVES		0				0								
*TX-0830	PRAXIAR CLEAR LAKE	10/20/2017	HYCO FUGITIVES														
*1X-0830	EXXONMOBIL BEAUMONT	ACT 01/09/2018	HYCO FUGITIVES		U				0								
*TX-0832	REFINERY	ACT	FUGITIVES		0			AVO	758	TON/YR							
			Equipment Leaks from					Best management practices to prevent, detect and repair leaks of									
		04/26/2018	Natural Gas					natural gas from the piping									
*VA-0328	C4GT, LLC	ACT	Components		0		Work practice requirements	components.	0								
			Fugitive emissions from														
*CO-0067	LANCASTER PLANT	6/4/2013	leaking components		0			LDAR	0			0			0		
*CO-0068	LUCERNE GAS PROCESSING PLANT	1/12/2014	Fugitive emissions from		0		Fugitive emission component leaks from a natural gas processing	LDAR	200	TON COSE	PER YEAR				0		
	PORT DOLPHIN ENERGY	1/13/2014	leaking components Fugitive GHG		0		plant associated with the expansion project.	a gas and leak detection system will	200	TON COZE	I DR I DAR	0	+		0		
*FL-0330	LLC	12/1/2011	emissions		0		Process Piping fugitives	be used.	0			0			0		
								USE OF A LEAK DETECTION									
								AND REPAIR (LDAR)									
<u>                                     </u>	INDIANA GASIFICATION,		FUGITIVE LEAKS				WILL BE CONTROLLED BY A LEAK DETECTION AND	PROGRAM FOR THE NATURAL	- _			L					
*IN-0166	LLC EUNICE GAS EXTRACTION	6/27/2012	FROM PIPING Process Fugitives (16)		0		REPAIR (LDAR) PROGRAM.	GAS AND SNG PIPING LDAR programs: NSPS KKK and	0	-		0			0		
	PLANT	5/1/2013	(FUG 0001)		0			LAC 33:III.2121	0			0			0		
								Compliance with LDAR programs under 40 CFR 60 Subpart OOOO,									
	PLAQUEMINE NGL		Fugitive Emissions					under 40 CFR 60 Subpart OOOO, LAC 33:III.2111, and LAC									
*LA-0271	FRACTIONATION PLANT	5/24/2013	(FUG-01)		0			33:III.2122	0			0			0		
								IMPLEMENTATION OF AN									
								AUDIO, VISUAL AND OLFACTORY (AVO) PROGRAM									
			FUGITIVE GHG					ON A WEEKLY	1								
*MD-0041	CPV ST. CHARLES	4/23/2014	EMISSIONS		0			BASIS	0			0			0		
							NATURAL GAS PIPELINE COMPONENTS, INCLUDING VALVES, CONNECTORS, FLANGES, PUMP SEALS AND										
	WILDCAT POINT						PRESSURE RELIEF VALVES WITHIN THE FACILITY										
*MD-0042	GENERATION FACILITY	4/8/2014	EQUIPMENT LEAKS		0		BOUNDARY		0			0			0		
*PA-0301	CARPENTER COMPRESSOR STATION	3/31/2014	Equipment Leaks	Natural Gas	0							0			0		
1 A-0301	STATION	3/31/2014	Equipment Leaks	Naturai Gas	0				1			0			0		
							The Permittee shall implement the TCEQ 28VHP and 28 CNTQ leak detection and repair (LDAR) programs for fugitive										
							emissions of methane. The Permittee shall implement an as-										
							observed AVO program to monitor for fugitive emissions										
							between instrumented monitoring. Permittee will install leakless										
							pumps and compressors equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal. Permittee										
							will amend the permit if the fugitive equipment count and										
l	C3 PETROCHEMICALS, PDH				_		emission estimates of the count/emission estimate exceeds the		1.	TPY OF CO2E	12-MONTH				_		
*TX-0744	CHOCOLATE BAYOU PLANT	0/12/2014	Process Fugitives		U	1	representations in the application.		1*	COZE	ROLLING TOTAL 12-MONTH	U	+	12-MONTH	U	1	
										1.	ROLLING TOTAL	-		ROLLING TOTA	L		
*TX-0744	C3 PETROCHEMICALS, PDH CHOCOLATE BAYOU PLANT	6/12/2014	Process Heaters						97	% THERM EFF	/TRAIN WITH MSS	230308	TPY CO2E	/TRAIN WITH MSS	0		
1A-0/44		0/12/2014	1 rocess rieaters		v				0/	TPY		230308	IF I COZE	intaa intaa	0		
[l	NUEVO MIDSTREAM,								l	CO2E/PLAN	12-MONTH	L					
*TX-0746	RAMSEY GAS PLANT LONE STAR NGL	11/18/2014	Process Fugitives		0	1	-		185	T	ROLLING	0	+		0	-	
	FRACTIONATORS, MONT		Fugitive Process														
*TX-0747	BELVIEU GAS PLANT	4/16/2014	Emission		0				0			0			0		
*TX-0748	FGE POWER, FGE TEXAS PROJECT	4/28/2014	SF6 Fugitive Emission Sources		0				0			0			0		
	FGE POWER, FGE TEXAS		Natural Gas Fugitive		0				0	+		0	_		0		
*TX-0748	PROJECT	4/28/2014	Emission Sources		0				0	1		0			0		
							Emissions from piping components (valves and flanges) associated with this project consist of methane (CH4) and carbon										
							dioxide (CO2). Because a majority of the GHG fugitives comes										
							from methane and the GWP is higher for methane, a conservative										
	GUADALUPE GENERATING STATION	12/2/2014	Components Fugitive Leak Emissions		0		estimate was done to assume that all piping components are in a rich methane stream.		l.			l <sub>0</sub>			0		
1A-0/33	STATION	12/2/2014	LCak Ellissions						0	+		0			0		
							Fugitive emissions from piping components (valves and flanges)		1								
							associated with this project consist of methane (CH4) and CO2. Because a majority of the GHG fugitive emissions come from										
							methane and the GWP is higher for methane than CO2, a		1								
	INDECK WHARTON ENERGY	1	Components Fugitive				conservative estimate was done to assume that all piping										
*TX-0757	CENTER ECTOR COUNTY ENERGY	5/12/2014	Leak Emissions Components Fugitive		0	1	components are in a rich methane stream.		0	1	-	0	_	1	0		
*TX-0758	CENTER	8/1/2014	Leaks		0				0			0			0		
	GOLDEN PASS LNG EXPORT							Work practice –leak detection	ĺ	1							
*TX-0766	TERMINAL	9/11/2015	Fugitive Emissions	1	0	1		and repair program	2569	TPY	1	10	1	1	10	1	1

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RBLCID		PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	PROCESS NOTES		EMISSION LIMIT 1		AVG TIME CONDITION	EMISSION LIMIT 2	UNIT	AVG TIME CONDITION	STANDARAD EMISSION LIMIT	AVG TIME CONDITION
1	SABINE PASS LNG							conduct a leak detection and repair		1	ANNUAL		I			
LA-0257	TERMINAL	12/6/2011	Fugitive Emissions		0			(LDAR) program	89629	TONS/YR	MAXIMUM	0			0	
	THOMAS C. FERGUSON		Fugitive Natural Gas								365-DAY ROLLING					
TX-0612	POWER PLANT	11/10/2011		Natural Gas	0		Fugitive NG emissions from piping components		327.2	T/YR	AVERAGE	0			0	
	THOMAS C. FERGUSON		Fugitive Natural Gas													
TX-0612	POWER PLANT	11/10/2011	emissions_NG-FUG	Natural Gas	0		Fugitive NG emissions from piping components		16.2	T/YR		0			0	
TX-0632	DEER PARK ENERGY CENTER LLC	11/29/2012	NG-FUG	Natural Gas	0		Fugitive Natural I Gas emissions from piping components (including valves and flanges)		0.11	T/YR	365-DAY ROLLING AVERAGE	0			0	
	DEER PARK ENERGY CENTER LLC	11/29/2012	NG-FUG	Natural Gas	0		Fugitive Natural I Gas emissions from piping components (including valves and flanges)		2.84	T/YR	365-DAY ROLLING AVERAGE	0			0	
TX-0633	CHANNEL ENERGY ENERGY CENTER, LLC	11/29/2012	NG-FUG	Natural Gas	0		Fugitive Natural Gas emissions from piping components (including valves and flanges)		0.29	T/YR	365-DAY ROLLING AVERAGE	0			0	
TX-0633	CHANNEL ENERGY ENERGY CENTER, LLC	11/29/2012	NG-FUG	Natural Gas			Fugitive Natural Gas emissions from piping components (including valves and flanges)		7.44	T/YR	365-DAY ROLLING AVERAGE	0			0	